What is claimed is:

1. A method of fabricating a three-dimensional microstructure, comprising the steps of:

performing a provisional processing work to create a prototypic structure based on data about a designed three-dimensional shape of the three-dimensional microstructure by controlling processing conditions used when a beam produced by a charged-particle beam system is scanned;

comparing the shape of said prototypic structure with said designed shape to find their differences; and

performing a non-provisional processing work while correcting said processing conditions to correct said differences.

2. A method of fabricating a three-dimensional microstructure as set forth in claim 1, wherein said processing conditions of said charged-particle beam system include accelerating voltage, beam current, scan rate, dot-to-dot interval, and dot wait time.

3. A method of fabricating a three-dimensional microstructure as set forth in claim 1, wherein said processing conditions are corrected by previously obtaining characteristic data indicating a relation between processed area and deposition rate and adjustively increasing the wait time of the beam scans by a value corresponding to (decrease in rate value)/(maximum rate value) according to a decrease in

the deposition rate.

4. A method of fabricating a three-dimensional microstructure as set forth in claim 1, wherein said processing conditions are corrected by previously obtaining characteristic data indicating a relation between processed area and deposition rate for each value of the beam current, first performing a processing work using a maximum rate region up to a kink portion of a large beam current, switching the beam current to the next greatest value in that portion, using this maximum rate region up to a kink portion of that beam current, and switching the beam current in turn subsequently similarly.

5. A method of fabricating a three-dimensional microstructure as set forth in claim 2, wherein said processing conditions are corrected by previously obtaining characteristic data indicating a relation between processed area and deposition rate and adjustively increasing the number of repetitions of the beam scan by a value equal to (decrease in rate value)/(maximum rate value) according to a decrease in the deposition rate.

6. A method of fabricating a three-dimensional microstructure as set forth in claim 1, wherein CAD data is used as said data about the designed three-dimensional shape of the three-dimensional structure, and wherein a processing work is carried out by finding plural sets of data about plural two-dimensional shapes by differentiation and controlling a

position hit by the charged-particle beam based on the plural sets of data about the two-dimensional shapes.

7. A focused charged-particle beam system used for fabrication of a three-dimensional microstructure, said system comprising:

means for obtaining data about a designed three-dimensional shape of the three-dimensional microstructure;

means for controlling a position hit by a charged-particle beam based on the data about the shape;

means for controlling processing conditions including beam energy, beam current, scan rate, dot-to-dot interval, and dot wait time;

means for obtaining images for grasping the three-dimensional shape of the processed structure; and

means for comparing said images with said designed three-dimensional shape to find their differences in shape;

wherein said processing conditions are corrected based on said differences in shape to thereby fabricate a structure close to the designed three-dimensional shape.

8. A focused charged-particle beam system used for fabrication of a three-dimensional microstructure as set forth in claim 7, wherein said means for obtaining the data about the designed three-dimensional shape has means for obtaining the data about the designed three-dimensional shape of the three-dimensional structure by entering CAD data,

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differentiating the data about the three-dimensional data, and finding plural sets of data about two-dimensional shapes perpendicular to the direction of the axis of the beam.